

AMENDMENTS TO THE SPECIFICATION

On page 36, lines 22-29, please replace the paragraph beginning on line 22 and ending on line 29 with the following amended paragraph:

The sequence for Kv3.4a is in Gene Bank under accession number X62841 (SEQ ID NO:6); gtgcgcctct ctgtctttct ggggtgggg ggggcgtgtc cccggcccgg agcatccctg tgcttcgcctc aacccttctga gacccggac cccttggatt gagtcctcga ccctgttctt cacctccctgc ctccccctagg ttcttcctgc caaatcccaa ccacctgtgc accacaaaaaa gccaactctt cctgctccga gccccggggg ggtggggtagg gggggaggca ggggcagagc cactctgcag aaggggccgc caccacctcc tgcctccctcc tcctccacca cctccctcctc cttctcgctc cctcccccctc cccgttctga cgctgcctcc ttgggaagggg tgtttggagg gcagcggccg ccccaagccg gagcccccga gcgccttta tgatcagctc ggtgtgtgc tcctccctacc gcggggcgcaa gtccccaaac aagcctccgt cccaaacatg tctgaaggag gagatggcca agggcgaggc gtccggagaag atcatcatca acgtggccgg cacgcgacat gagacctacc gcagcacccct gcgcacccta ccgggcaccc gccctgcctg gctggccgat cccgacggcg ggggtcgcc agagtcggat ggccggcggtc caggcagcag cggcagcagc ggcggccggc gggctgtga ttcttcctt gatccggacc cgggttttt tgcctatgtc tcacaactact accgcacggg caagctgcatt tgccccgcag acgtctgtgg gcctctttt gaggaagagc tcactttctg gggatcgtat gagacagatg tgaaccctg ctgctggatg acctaccggc agcaccgcga tgctgaagag gcactggaca tcitcagagag cccggacggg ggcgggggtg ggcgcaggcc cggcgacgag gctggagacg atgagccggat gttggccitg cagcgcctgg gccccatga aggaggctct ggccctggtg ctgggtccgg ggggtccgt ggctggcagc cccgaatgtg ggcccttgc gaggacccgt actcatcccg ggcggccagg gtggtagcct ttggctctct ctcttcattc ttggctccca ttaccaccct ctgctggag acccagcagg ccttcaacat tgacccgaaat tgacccgaga tccaccgggt agggaaatatc accagcgtgc gttccggcg ggaggtagaa acagaaccca ttcttaccctt catcgagggc gtgtgcgtga tgggttcac tctagatgc ctgggtcgca ttgtgtgtcg cccgtatcct ttggacttg tcaagaacat gtcacacatc atcgactttg tggccatctt gccccttac ctggaggtgg gattgagttgg cctgtcatcc aaggcagctc gagatgtgtc gggttccctg cgtgtggcgc gctttgtacg catccgtgg atcttcaagc tcacacgcca ctgggtggcc ctggcgtgtc tggccacac actccgggcc agcaccacac agttccctgtc gcttatcattc ttccctggccc tgggtgtgtc catcttgc accatgatct attatgtca gcaatcggtt gccaggccat ctgaccacac gggcaatgac cacaccgact tcaagaacat ccccatcggt ttctgggtgg ctgtggcact catgacaacg ctggctatg gggacatgtc tcataagaca tggtcagggaa tgctgggtgg tgcgtgtgt gcactggctg gtgtgctaac cattgccatg cctgtgcctg tcatcgtaa taacttttgt atgtactact cccctggctat ggcacaaagcag aagcttccca agaaacgaaa gaagcatgtc ccacggccac

cccagcttga gtcaccatt tactgcaagt ctgaggagac ttccccgg gacagcacct acagtgacac cagcccccct
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agtccctgc ccaccctgtt tccccacccc ctctccctc atggattgtt tcttctgacc atgttttgg agtgtccca gagaggtata
cctgggacct gccccccag ctgggtggtc ccaggctgct ctcacttggg ggtgtccctt gccagcagggtt ggcctgtga
agtcatgta aggcacgatt gcccctctgg ggtcaactgct tcactagc). The sequence for Kv3.4c is identical to the
Kv3.4a sequence except that 62 bp (position 2222-2283) of Kv3.4a are absent in Kv3.4c. As a
result of this alternative splicing, the first 608 amino acids of both variants are identical, but the
last 17 (for variant a) and 19 (for variant c) amino acids are completely different. Both variants
are described by Rudy and colleagues in Veaga-Saenz de Miera E. et al. (1993) Shaw-related K
channels in mammals. in Handbook of Membrane Channels: Molecular and Cellular Physiology.
(Peracchia C, ed. Academic Press, Orlando) pp 41-78.